

**CLAIMS**

What is claimed is:

1. A composite heat sink device for surface mounting to a circuit board,  
2 said device comprising:
  - 3 a heat sink body consisting essentially of aluminum, said body comprising at  
4 least one mounting land with a substantially planar surface, and  
5 a thermally conductive solderable element mechanically fixed to each said  
6 mounting land, each said element having a first planar surface which is contiguous with at least  
7 one said planar surface of said heat sink body and an opposed second planar surface for  
8 soldering to said circuit board.
2. A composite heat sink device as in claim 1 wherein said heat sink body  
has two of said lands, said substantially planar surfaces being coplanar.
3. A composite heat sink device as in claim 2 wherein said body comprises  
a heat dissipating fin upstanding from each of said lands, and a bight upstanding from said  
lands between said fins.
4. A composite heat sink device as in claim 3 wherein said bight has a  
planar section which is parallel to said lands and intended to be arranged over an electronic  
device on said circuit board.
5. A composite heat sink device as in claim 1 wherein said heat sink body is  
formed from a sheet of aluminum.
6. A composite heat sink device as in claim 5 wherein said heat sink body is  
formed from a sheet of anodized aluminum.

1           7. A composite heat sink device as in claim 6 wherein said anodized  
2 aluminum is blackened.

1           8. A composite heat sink device as in claim 1 wherein said heat sink body is  
2 extruded.

1           9. A composite heat sink device as in claim 1 wherein said element is  
2 mechanically fixed to said land by providing at least one projection on said land, providing at  
3 least one socket in each said element, and inserting each said projection into a respective at  
4 least one socket in an interference fit.

10. A composite heat sink device as in claim 9 wherein the element is  
swaged onto the land.